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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,577	05/15/2001	Christoph Herrmann	DE 000079	1429
24737	7590	08/24/2004	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			KADING, JOSHUA A	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/855,577

Applicant(s)

HERRMANN ET AL.

Examiner

Joshua Kading

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/15/01, 10/20/03</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: Page 2, line 33 of the Specification states "gold, Sasami". It is believed these two words are typos

5 and the following is suggested as a replacement: --Gold, Kasami--.

Appropriate correction is required.

Claim Objections

Claims 5 and 10 are objected to because of the following informalities:

10 Claim 5, line 3 makes reference to a "Kamasi" sequence. It is believed there is no such sequence as a "Kamasi" sequence. Further it is assumed this is a typo and the correct sequence name should be --Kasami--. Further support for this can be found in applicant's referenced European Application, which has a U.S. Patent 6,546,062 counterpart. The support for a "Kasami" sequence is found in claim 4 of U.S. Patent
15 6,546,062.

Claim 10, line 11 states "the ensuing peak". There is no antecedent basis for this limitation. Therefore, it should be changed to --an ensuing peak--.

Appropriate correction is required.

20

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

5 for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation "this user channel" in line 4. There is insufficient antecedent basis for this limitation in the claim. There is no "user channel" ever disclosed in claim 7 or in parent claim 1, only "a channel assigned to a terminal" is
10 disclosed that could possibly be a "user channel".

Claim 7 further recites the limitation "changeover" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim. There is no mention of a "changeover" anywhere in claim 7 or in parent claim 1, therefore it is unclear what applicant means.

15

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

20 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25 Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kokko et al. (U.S. Patent 5,790,534) in view of Rasky et al. (U.S. Patent 5,428,647).

Regarding claim 1, Kokko discloses "a wireless network comprising a radio network controller (col. 7, line 32 discloses a BS 14 which acts as the radio network controller) and a plurality of assigned terminals (col. 7, lines line 26 discloses MSs 12 which act as the terminals) for exchanging useful data and control data, which terminals
5 respectively have a buffer for buffering data packets to be transmitted to the radio network controller via a contention channel and a measuring device for measuring the occupancy level of at least one buffer, characterized in that

a terminal, when an occupancy level of a buffer or various buffers is exceeded, is provided for sending a signaling sequence at a start time predefined by the radio
10 network controller (col. 7, lines 26-32 where the "reservation request" is a message sent from the mobile station to the base station and the mobile uses sequences or codes when sending messages to the base station as seen in Table 2 under spreading codes, therefore the reservation request has a sequence or code in it),

in that the radio network controller, after detecting a signaling sequence assigned
15 to a terminal, is arranged for sending an indication to the terminal to further transmit the data packets over a channel assigned only to the terminal (col. 7, lines 32-38 where the base station receives the message and in response informs the terminal of a channel it can use to transmit data)."

However, Kokko lacks what Rasky discloses, "in that the radio network controller
20 includes a device for correlating a signaling sequence sent by a terminal and for detecting the pulse developed from a received and correlated signaling sequence (col. 4, lines 62-col. 5, lines 1-9 where the M-tap FIR filter 110 is used to correlate the signal

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and the Peak detection mechanism 114 is used to detect the pulse or peak of the signal)...”

It would have been obvious to one with ordinary skill in the art at the time of invention to have the correlator and pulse detector for the purpose of synchronizing the sequence (Rasky, col. 5, lines 15-19). The motivation for synchronizing the sequence is that the data, when received, can begin to be decoded at the starting location and a useful and correct message will have been received.

Claim 8 has identical limitations to those in claim 1. Therefore, the corresponding limitations of claim 1 in claim 8 are rejected for the same reasons as those in claim 1.

Although claim 9 is broader than claim 1, certain limitations of claim 9 are identical to those in claim 1. Therefore, the corresponding limitations of claim 1 in claim 9 are rejected for the same reasons as those in claim 1.

Although claim 10 is a method claim and claim 1 is an apparatus claim, limitations performed in the method of claim 10 can be performed by the apparatus limitations of claim 1. Therefore, the corresponding limitations of claim 10 in claim 1 are rejected for the same reasons as those in claim 1.

Regarding claim 2, Kokko and Rasky disclose the network of claim 1. However, Rasky lacks what Kokko further discloses, “the channel assigned to a terminal is a

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dedicated channel (col. 3, lines 9-15 where the data/traffic channel are divided into a plurality of frames and each frame is dedicated to one terminal at a time).” It would have been obvious to one with ordinary skill in the art to have the channel assigned to the terminal be a dedicated channel for the same reasons and motivation as in claim 1.

5

Regarding claim 3, Kokko and Rasky disclose the network of claim 1. However, Rasky lacks what Kokko further discloses, “a terminal is provided for measuring the occupancy level of the buffer or of various buffers in the layer for the radio link control (col. 7, lines 26-38 where it is implied that the measuring of the buffer is for the radio link control layer because it is used to make a determination on when data needs to be sent and at what rate).” It would have been obvious to one with ordinary skill in the art to include the RLC layer for use in measuring the buffer for the same reasons and motivation as in claim 1.

10

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Regarding claim 4, Kokko and Rasky disclose the network of claim 1. However, Kokko lacks what Rasky further discloses, “the radio network controller includes a matched filter generating at least one pulse after a signaling sequence has been received (col. 4, lines 62-col. 5, lines 1-3 where although it is not explicitly stated that the devices of Rasky are in a radio network controller, it is known that any receiver, including a radio network control, in a code based system must have the components in Rasky to properly decode the messages) and includes a peak detector and in that the peak detector, in a certain detection window whose start time and duration are

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determined by the channel properties and the start time of a signaling sequence to be detected, is provided for detecting the peak on the output of the matched filter (col. 5, lines 2-9).” It would have been obvious to one with ordinary skill in the art to include the matched filter with the peak detection for the same reasons and motivation as in claim

5 1.

Regarding claim 5, Kokko and Rasky disclose the network of claim 1. However, Rasky lacks what Kokko further discloses, “a terminal is provided for sending a Gold, [Kasami] or Golay sequence as a signaling sequence at a certain start time (Table 2, in
10 col. 4, specifically the Spreading codes section where the reverse link uses a Kasami code and the forward link uses a Gold code).” It would have been obvious to one with ordinary skill in the art to include the Kasami or Gold codes for the same reasons and motivation as in claim 1.

15 Regarding claim 6, Kokko and Rasky disclose the network of claim 1. However, Rasky lacks what Kokko further discloses, “a terminal is provided for sending a signaling sequence at a start time predefined by the radio network controller when a sum of the occupancy levels of all the buffers exceeds a predefined threshold (col. 7, lines 26-32 where although it is not directly stated that the sum of the buffers exceeds
20 the predefined threshold, it would have been obvious to one with ordinary skill in the art to know that if one buffer exceeds a threshold then the sum of all buffers also exceeds a threshold for sending the sequence).” It would have been obvious to one with ordinary

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skill in the art to have the sum of all the buffers exceed the threshold for the same reasons and motivation as in claim 1.

Since it is unclear what "this user channel" is referring to, it is assumed it is referring back to the channel assigned in claim 1. Also, the "changeover" is assumed to be the assigning of the channel in claim 1.

Regarding claim 7, Kokko and Rasky disclose the network of claim 1. However, Rasky lacks what Kokko further discloses, "a terminal is provided for transmitting further information about the traffic load of the terminal over this user channel after receipt of the indication and changeover to the assigned channel (col. 7, lines 32-34 where the mobile station, or terminal, is capable of sending capacity, or traffic load, needs for transmission)." It would have been obvious to one with ordinary skill in the art to further transmit traffic load information for the same reasons and motivation as in claim 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (757) 272-3079. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

- 5 For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joshua Kading
Examiner
Art Unit 2661

10 August 19, 2004



KENNETH VANDERPUYE
PRIMARY EXAMINER